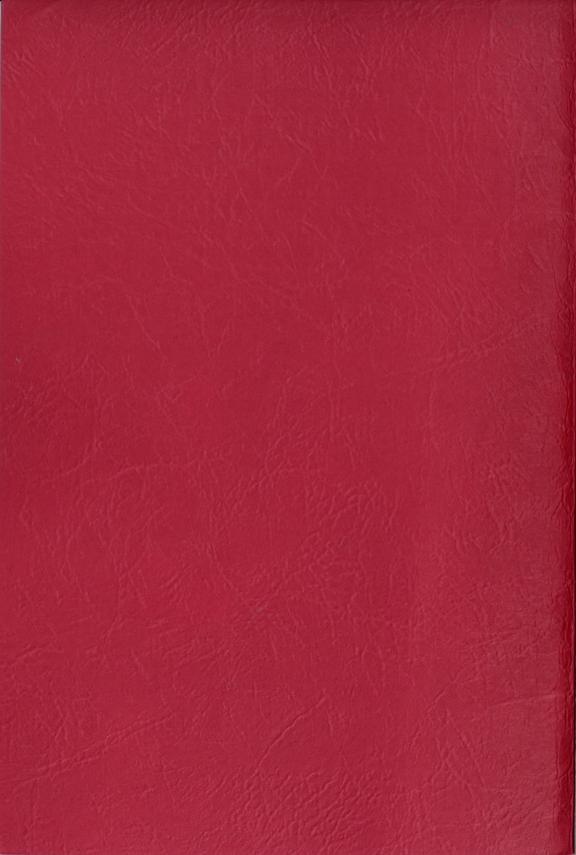


1947-1946





Joplin Junior College

Joplin, Missouri

ANNOUNCEMENTS AND GENERAL INFORMATION

ISSUE FOR

1 9 4 7

1 9 4 8

ACCREDITED

University of Missouri

State Department of Education

Member American Association of Junior Colleges

TABLE OF CONTENTS

The Board of Education	3
The School Calendar	4
The College Staff	5
Section I.	
General Information	9
Admission	11
Expenses	15
Student Activities	17
Regulations, Grades, Degrees	20
regulations, Glades, Degrees	20
Section II.	
Arts and Science Courses	23
Terminal Courses	23
Arts and Science Curriculum	24
Pre—Agricultural Curriculum	25
Pre—Business Administration Curriculum Pre—Dental Curriculum	26
	27
Pre—Engineering Curriculum Pre—Journalism Curriculum	28
Pre—Law Curriculum	29 30
Pre-Medical Curriculum	31
Pre—Nursing Curriculum	32
Applied Music Curriculum	33
Teacher—Training Curriculum for Elementary Level	34
Teacher—Training Curriculum for Secondary Level	35
General Business Curriculum	39
General Culture Curriculum	41
Vocational Shops Curriculum	41
Section III.	
Statement of Courses	42

JOPLIN PUBLIC SCHOOLS

Board of Education

1947-48

MEMBERS

Mark D. Henderson Joe A. Reeves F. Nelson Christman Joe Harding John O. Nelson John F. Wilson

OFFICERS

Mark D. Henderson, President
Joe A. Reeves, Vice President
Virgil H. Board, Treasurer
F. Nelson Christman, Secretary
Roi S. Wood, Superintendent of Schools

JUNIOR COLLEGE CALENDAR

1947-48

1947		
	SEPTEMBER I	Facualty Conference
	SEPTEMBER 2	Registration
	SEPTEMBER 3	School Session Begins
	NOVEMBER 27 – 28	Thanksgiving Holidays
	DECEMBER I	School Reconvenes
	DECEMBER 20 - JANUA	RY 4 _ Christmas Holidays
1948		H A cal
	JANUARY 5	School Reconvenes
	JANUARY 16	First Semester Ends
	JANUARY 19 R	Registration for Second Semester
	JANUARY 20	Second Semester Begins
	MARCH 26	Easter Holiday
	MAY 14	Class Day
	MAY 23	Baccalaureate
	MAY 24	_ Commencement Exercises
1948		
	MAY 31	Registration for Summer Session
	JUNE 1	_ Summer Session Begins
	AUGUST 6	Summer Session Ends

FACULTY 1947 -- 1948

	Culver-Stockton College A. B., Central Wesleyan College A. M., University of Missouri	
Harlan Bryant	B. S., Southwest State College A. M., University of Missouri Ed. D., University of Missouri	Dean
Grad	S., Southwest Missouri State College uate Work, Hardin-Simmons University luskogee, Oklahoma Business College	Registrar
Edith Gorman	B. S., K. S. T. C., Pittsburg, Kansas George Peabody Library School	Librarian
Margaret Burke Associa	Secretary to ate in Business Joplin Junior College	the Dean
College of A	arts and Science	
College of T	erminal Commercial Education	
St	S., Southwest Missouri State College out Institute, Menomonie, Wisconsin aduate Work, University of Missouri	l Drawing
Arthur Boles		Art
	Chicago Art Institute	
Ada Coffey	A. B., A. M., University of Kansas	Literature
	ond	of Women
	History, Economics, Co. B., A. M., Washington University	Geography

L. W. Hartel			
M. S., Kansas State College, Manhattan, Kansas			
Cleetis Headlee English			
B. S., A. M., University of Missouri			
E. A. Henning			
E. B. Hill Speech			
A. B., Southwest Texas State College Graduate Work, University of Missouri			
Arnold E. Irwin Social Science			
B. S., K. S. T. C., Pittsburg, Kansas A. M., University of Missouri			
Martha Ann McCormick			
Ph. B., A. M., University of Chicago			
Theo M. Nix Music			
B. A., Oklahoma Agricultural & Mechanical College A. M., University of Tulsa			
Eula Ratekin			
A. B., A. M., University of Missouri			
Catherine W. Selves			
B. S., Northeast Missouri State Teacher's College A. M., University of Chicago			
Lela A. Smith English			
A. B. and B. S., Drury College A. M., George Peabody College			
Lillian Spangler			
Linn Stair Physical Education			
B. S., Southwest Missouri State College Iowa State College			
Vera Margaret Steininger			
Paul R. Stevick Philosophy and Sociology			
A. B. Southwestern College, Winfield Kansas			
S. T. B., S. T. M., Boston University			
Ph. D., University of Iowa			

Dorothy A. Stone Stenography, Typewriting, Accounting B. S., A. M., University of Missouri
Evelyn Triplett Physical Education B. S., K. S. T. C., Pittsburg, Kansas A. M., Texas State College for Women
Ermie Marsh Whitfield
James Willey Chemistry
A. B., University of Kansas
Applied Music Instructors
Leitha Rue Bonds Piano
Calhoun School of Music, Joplin. Stuied with Helen Scoville
Marie A. Guengerich Piano
Graduate, Calhoun School of Music, Joplin. Studied with Helen Scoville, Maurice Dusmenil, John Thompson, Wiktor Labunski, Albert Mirovitch. Student in University of Chicago, 1918. President, Missouri Music Teachers Association, 1935-1936.
L. Buryl Harman Piano
Graduate, Chicago Musical Collage. Studied piano under Dr. Edward Collins, Leopold Godowski, Percy Grainger, and Donnanyi; history under Herbert Witherspoon; harmony under Felix Borowski and Laura Drake Harris; Counterpoint under Dr. Weslie Laviolette, and composition under Dr. Arnold Volpe.
Evelyn Hinton
B. S. in Music Supervisorship, Kansas State Teacher's College. Student of George Winter, Joplin; John Wilcox, Denver; Percy Rector Stevens, New York; Cesare Sturani, New York; Student of Organ two years, Columbia University, New York.
Mae Marshall Piano-Organ
Calhoun School of Music, Joplin. Studied with Henoit Levy. Studied organ with Arthur Dunham, Chicago; Dr. Wm. C. Carl, New York; harmony and counterpoint with Frank Wright, Brooklyn; Memorization and Analysis with Winslow Cheney, New York.
Mary Bingham Porter Violin
Graduate, Drake School of Music, Chicago. Graduate work at Von Ende School of Music, New York. Special study with Sametini, Chicago Musical College, and Jacques Gorden, New York. Master Classes of Leopold Auer.

Oliver Sovereign
Association. Nira Wright
Graduate, Lamperti-Valda School of Singing, Paris. Studied with John S. Van Cleve, Cincinnati; Mme. Richards Claggett, Dallas; Mme. Johan Hess Burr and William Nelson Burritt,
Chicago; Mme. Anna Zeigler, Mm. Valda and Frantz Prochowski, New York.

College of Vocational Education College of Terminal Vocational Education

R. W. Baker	Director Voca	itional	Education
	Four years trade experience A. B., Central College A. M., University of Missouri		
Claude B. Gilbert Tv	; wenty-nine years trade experrienc		Mechanics
Carl L. Graham	Fifteen years trade experience University of Missouri	and S	heet Metal
Cooper C. Kelly	Fourteen years trade experience University of Missouri	Ма	chine Shop
Ellis Kindred Two	enty-eight years of trade experier K. S. T. C., Pittsburg, Kansas University of Missouri	Auto	Mechanics
Dillard F. Smith	Twenty years trade experience	Auto	Mechanics
Howard G. Weav	er Three years trade experience Joplin Junior College University of Missouri		Carpentry
Carl H. Well	Fifteen years trade experience University of Missouri	Gene	eral Metals
T 1 1777 41 :	~		

SECTION I

General Information

The information given in this catalogue is for the school year 1947-1948 only. Changes may be made at any time. Any student registered in Joplin Junior College should refer to his catalogue frequently to guide his progress here. He will find statements there on almost any problem that may arise. All decisions will be based on what is stated in the catalogue. Any individual, interested in attending Joplin Junior College, can find all details of requirements for registration, fees, and all other matters herein.

Historical Statement

The Joplin Junior College opened September 6, 1938 in its own building at Fourth and Byers Avenue. Blaine Hall on Fifth and Byers Avenue was dedicated November 1, 1946; simultaneously Blaine Hall Cafeteria began serving; and the Lion's Den, an all-student recreation room was opened. The new Vocational Building on thirteenth and Pearl will be ready for occupancy during the Fall 1947. G. I. City on thirteenth and Murphy Avenue was opened to veterans for the Spring Term, 1947.

From the beginning of its existence the Joplin Junior College has been a public school, directed and sponsored by the Board of Education; hence, the Superintendent of Schools for Joplin acts, also, as the President of the College. The first president was E. A. Elliot. His presidency extended from 1938 to 1943. Roi S. Wood became president in 1943 and is still president of the Joplin Junior College. He is definitely interested in furthering the progress of the College. Under his leadership the College has added Blaine Hall, G. I. City and the new Vocational School. The first Dean of the College was H. E. Blaine who retired at the end of the school year, 1946-1947, after ten years with the College. Blaine Hall was so-named in honor of his years of service.

Organization

The Joplin Junior College comprises the following divisions:

College of Arts and Science
College of Terminal Commercial Education
College of Vocational Education
College of Terminal Vocational Education

The College Year

The college year comprises for the College of Arts and Science, the College of Terminal Commercial Courses, and the College of Vocational Education two semesters and one summer session. Each semester is eighteen weeks and the summer term is ten weeks. Two semesters constitute an academic year. The College of Terminal Vocational Education is open continuously throughout the calendar year.

Location

The Joplin Junior College is located at Fourth and Byers Avenue, within walking distance of the business district and bus terminals, accessible by highways, and on inter-urban bus routes. Blaine Hall is on the corner of Fifth and Byers, adjacent to the College. The Vocational School is located at Thirteenth and Pearl and, likewise, is easily accessible by various means of transportation. G. I. City at Thirteenth and Murphy is on an inter-urban bus route as well as being within walking distance of the College.

Equipment

Grounds and Buildings:

The College and Blaine Hall campus is a large grassy lawn spotted with beautiful elm trees and surrounded by well-kept hedges. In the College building the rooms are large and well lighted; the halls and stairways are wide and commodious. There are rooms in the basement for art, teacher-training, and engineering drawing. On the second floor the offices of the Dean and his secretary, the office of the Registrar, the library, auditorium-gymnasium. and several recitation rooms. On the third floor are the laboratories, the machines rooms, and other recitation rooms.

In Blaine Hall are the Blaine Hall Cafeteria, one recitation room, offices of the Chart (school newspaper) and of the Crossroads (school annual), and the Lion's Den which is a recreation room for all students.

Blaine Hall Cafeteria has the facilities for serving several hundred students. The policy of the Cafeteria is to serve well-balanced meals at a very low cost to the students. Student help tends to keep prices to a nominal amount.

The College Library has over 6,500 volumes. The books have been carefully selected, and are, for the most part, of the present value for reference in the different departments of college study, thus making a working library of exceptional value. A card catalogue arranged by author, title, and subject, makes the resources of the library easily available. The current issue of 80 leading magazines and scientific journals, as well as several cosmopolitan newspapers, are received regularly, and placed in the reading room before they are filed for reference books, books reserved for classes, general periodicals, and certain other groups of books are to be consulted only in the reading room. Books not specially reserved may be drawn for home use for one week.

The College gymnasium also serves as an auditorium. All football games are played at Junge Stadium, Thirteenth and Murphy and basketball games are usually played in the Memorial Hall Building located at Eighth and Joplin Streets.

G. I. City constructed in dormitory style offers accommodations for 96 single veterans. All rooms are beautifully painted, very clean, and adjacent to bath facilities. Linens of all kinds furnished.

Publications of the College

The Crossroads, the school annual, has been published each year since the College was opened. Each year the annual is the product of a student staff with three faculty sponsors. It is an honor to be chosen Editor of the Crossroads, Business Manager of the Crossroads, or even on the staff which is limited to a very few. Recently student photographers have added much to the student interest in the annual. Every student is urged to have his picture made for the annual; likewise, each organization is urged to respond with group pictures and other pictures of interest.

The Chart, the school newspaper, is traditional with the College. With a student staff and faculty sponsors, the Chart endeavors to publish advance news and to record events of interest to all. Approximately 10 issues are published each school year. There is always a special for the Christmas season and the close of the year. Advertising from local merchants helps finance the paper. Students are eager to be an editor, or a reporter on the Chart staff.

The Alumni-Student Organization sends out at least two bulletins entitled JOPLIN JUNIOR COLLEGE NEWS each year besides an announcement concerning the annual Alumni-Student Banquet.

Admission

The Office of the Registrar has charge of all matters pertaining to admissions in the Junior College of Arts and Science, the College of Terminal Commercial Education and the academic subjects of the College of Vocational Education. The Director of Vocational Education has charge of all matters pertaining to admissions in the College of Terminal Vocational Education and the Vocational subjects of the College of Vocational Education. Inquiries regarding entrance to the Junior College proper should be addressed, Office of the Registrar, Joplin Junior College, Joplin, Missouri. Inquiries regarding admission to the College of Vocational Education (all vocational work) should be addressed, Director of Vocational Education, Joplin Junior College, Joplin, Missouri.

Admission to the Freshman Class

The Joplin Junior College is open to all Freshmen. There are two plans for admission to the freshman class: 1. Plan A provides admission by certificate or transcript of record without examination. The applicant must have passed his high school course with satisfactory marks, and he must be officially recommended by his school. His high school course of study must have included the specific subjects or units required by the curriculum he wishes to enter. The diploma will not be accepted as a credential: and the proper form of certificate or transcript signed by the principal or superintendent must be sent to the Office of the Registrar. 2. Plan B provides admission through the USAFI examination on the high school level with a score of 45 on at least four parts and not less than 35 on any one of the five parts. All transcripts received in the Office of the Registrar are placed on file and become the property of the Joplin Junior College. Each applicant for entrance in the College fills out the Personal Reference Sheet at the time of his first enrollment.

Subjects Accepted for Admission under Plan A: The entrance units which may be accepted in satisfaction of the specific requirements for admission and the maximum and minimum number of units in each subject which may be offered, are presented in the following list:

Max	. Max.
Subject	. Subject Min.
English	***American Problems 1—1
Grammar, Composition	Early European History 1-1
and Literature 4—	Later European History 1—1
Speech 1—1.	2 Geography 1—1-2
Mathematics (4—1	Economics 1-2—1-2
*General Mathematics 1—	1 Sociology 1-2—1-2
Algebra 2—	1 Government 1-2—1-2
Plane Geometry 1—	International Relations 1-2—1-2
Solid Geometry 1-2—1-	2 State History 1-2—1-2
Plane Trigonometry 1-2-1-	
Social Studies(5—1) General Science 1—1
Citizenship or Community	General Biology 1—1
Problems 1—	1 Physics 1—1
**World History 1—	
American History 1—	1 Botany 1—1-2

Zoology 1—1-2	Latin 4—1
Adavnced Physical Science 1—1	German 4-1
Physical Geography 1—1	French 4—1
Physiology 1—1-2	Spanish 4—1
Foreign Language (6—1)	

*General Mathematics does not count toward the requirement in mathematics for admission to the College of Engineering.

**World History may not be accepted with either Early or Later European History

***American Problems may not be accepted with Economics, Sociology, Government,
or International Relations.

The remaining units to total fifteen may be selected from the above list or from any other courses accepted by an accredited school for its diploma, with the exception of physical education and military science. Not more than two units in diversified occupations may be offered.

The specific units required by each curriculum are indicated with the complete requirements of each curriculum listed in Section II.

Admission to the Sophomore Class

A student who has been regularly admitted to another college or university of recognized standing will be admitted to the College upon presentation of a certificate of honorable dismissal and official transcripts of records of high school and college work, provided his scholastic record has been satisfactory. Should the applicant have an average below M he will be accepted on probation but cannot be candidate for a degree until his average is an M in which case the probation would be removed. Claims for advanced standing, in order to receive recognition, must be made by the student within the first semester of entrance. Claims for credit from the service training programs conducted by the various branches of the armed forces must be made within the first semester of entrance. The recommendations of the American Council on Education as set forth in "A Guide to the Evaluation of Educational Experience in the Armed Services" will serve as a basis for granting such credit. In order to be counted toward a degree the credit granted must be appropriate to the student's curriculum. If a student files with the Registrar complete official credentials at least six weeks before the opening of the semester, claims for advanced standing will be passed upon and the student notified before registration.

A student already enrolled in Joplin Junior College, who has completed at least twenty-seven hours with an average of M, is automatically classified as a Sophomore at the first enrollment after the completion of the twenty-seven semester hours with twenty-seven points. A student who has the twenty-seven semester hours

but does not have the required number of points will be placed on probation. A student who finishes the first semester as a Sophomore on probation and who has credits and honor points that average an I (at least one-half as many honor points as credits), will be removed from the list of candidates for degrees but may remain in school as long as this average is maintained. At no time can he be a candidate for a degree, until his total average is an M. A student who finishes the first semester as a Sophomore on probation; or a student who has attended two terms without accumulating enough credits and honor points to be of Sophomore standing and who has failed in at least one-third of his entire number of courses will be dismissed from the College, for at least one semester.

Admission of Special Students

Anyone over twenty-one years of age who does not qualify for admission as a regular student, but who by reason of special preparation or attainments may be judged qualified to pursue certain courses, will be admitted as a special student though not as a candidate for a degree. Any student who registers for less than twelve hours in the two regular semesters or less than eight hours in the summer semester will also be classified as a Special Student. Registration as a Special Student will be limited to a very few who have unusual circumstances. In all cases, admission will be granted through the Office of the Registrar.

With the consent of the Registrar and the instructors concerned, students may be admitted to any division as hearers. Hearers must be registered and pay fees, but are not required to take course examinations and shall receive no credit.

Admission of Vocational Students

Any student who enrolls in the College of Terminal Vocational Education must satisfy the requirements of the Terminal Vocational Shops Curriculum. A student entering the college of Vocational Education does not have any educational requirements for entrance and enrollment for this type of student may take place at any time during the school year. Vocational courses are being conducted to meet requirements of Veterans who are using their G. I. Bill of Rights to learn a trade.

Registration

No student will be admitted to any curriculum of the College for work for which he is to receive credit after expiration of two weeks following the close of registration and during said two weeks only for extraordinary cases.

Expenses

Fees: All statements as to fees contained in this catalogue are by way of announcement only for the school year covered by this catalogue; but, even though so stated, the College reserves the right to change any and all fees at any time, without any notice being given in advance of such a change.

Time of Payment of Fees: All fees must be paid in full at the time of registration at the opening of each semester or term as a condition of admission to classes. Registration is not complete until all fees are paid.

Tuition: Tuition is free to all students under 20 years of age who are residents of the School District of Joplin.

Tuition for Non-Residents, or Students 20 Years of age and Over: Students who are non-residents of Joplin, or students who are 20 years of age and over, are required to pay a tuition fee of thirty dollars (\$30.00) per semester. For eight hours or more the tuition is \$30.00. For seven hours or less the tuition is \$2.25 per hour.

Matriculation Fee: A five dollar (\$5.00) matriculation fee is charged all students and is payable at the time they enroll in the Junior College for the first time.

Incidental Fee: All students in the Joplin Junior College are required to pay an incidental fee of eighteen dollars (\$18.00) per semester. This fee includes all expenses required in every course, except breakage in chemistry laboratory courses, tuition charges, as well as publications of Chart and Crossroads. Students who are permitted to carry work of from five to eight hours during the semester will be admitted on payment of an incidental fee of eleven dollars (\$11.00) per semester. Students enrolled for credit of four hours or less for the semester will be admitted on payment of an incidental fee of seven dollars (\$7.00).

Textbook and Lock Rental Fee: All textbook and locks are owned by the Joplin Junior College and are rented by the college. Rental deposits are required of all students and refunds on these deposits, when all books and locks are turned in by the student, will be made as follows:

Number of Hours	Amount of Textbook & Lock Rental Fee	Refunds
9 hours or more	\$8.00	\$3.00
5 to 8 hours	\$6.00	\$2.00
1 to 4 hours	\$3.00	\$1.00

A lost book must be paid for before a student is eligible for the refund, and before his record can be cleared.

Applied Music Fee: A fee of thirty dollars (\$30.00) per semester will be made and must be paid at the College at the time of enrollment.

Vocational Shops Fees: Vocational courses carry special fees. Information on these fees may be obtained form the Director of Vocational Education.

Laboratory Breakage Fee: A deposit of one dollar (\$1.00) for breakage is charged for all chemistry laboratory courses. Any unused portion will be refunded at the close of the semester. Should the amount of breakage exceed the deposit, the difference must be paid at the end of the semester in order to clear all records.

Fee for Late Registration: Every student who enrolls after the close of the enrollment period of each semester must pay a fee of \$1.00 for late registration, in addition to the other fees.

Fee for Change in Program: Regardless of what change is made in the program, a fee of \$1.00 must be paid for each petition to change a course after the period allowed for changing programs.

Examination Fee: Students absent from a periodic or term examination may be given a special examination at the time set by the instructor upon payment of fifty cents (.50) in advance. The instructor is responsible for requiring a student to show a receipt from the office before administering the examination.

Transcript Fee: A fee of fifty cents (.50) is charged for a duplicate transcript of credits.

Refund of Fees: Students leaving school or dropping courses for which they have paid fees, prior to the fifth week of the term involved, will receive a refund of the fees paid in accordance with the following schedule:

Time of Withdrawal

Within the first and second weeks Within the third and fourth weeks After the fourth week

Amount of Fee to be Refunded 80 per cent

50 per cent · No Refund

Scholarships: The Junior College offers a scholarship to the high ranking high school graduates. The scholarship covers the tuition for one year for non-resident students or the incidental fee for resident students. This scholarship may be awarded to a student in the highest one-tenth of the current graduating class. Another scholarship is offered the most outstanding student in either the speech department or the field of athletics.

A limited number of work scholarships are available to students needing help in meeting school expenses. Students interested in obtaining one of these scholarships should make application to the Dean of the Junior College.

Living Quarters for Students

Students who come from outside Joplin can find sleeping rooms, rooms with kitchen privileges, and small apartments in many private residences easily accesible to the College.

Single veterans will find complete accommodations in the G. I. City for a fee of \$12.00 per month. For reservations in G. I. City write the Office of Registrar, Joplin Junior College, Joplin, Missouri.

Student Activities

The opportunity is given to every sudent in Joplin Junior College to exercise his many interests, not only in hard work with his studies, but in activities which bring him into contact with his fellow students.

Different types of organizations have been formed among the students of the college. They fall under the head of moral, cultural and social.

Student Senate. The Senate is composed of the president, vice president, and secretary-treasurer of the student body elected annually by the school at large, the president and secretary of the sophomore and freshman class, the president and secretary or two representatives of each student organization of the college, with the Deans of the College and one other faculty member as advisers.

The president, vice president, and secretary-treasurer of the student body, (and thus of the Senate), must have completed 26 semester hours of college credit with an M average. Thirteen of the 26 credits must have been earned in Joplin Junior College.

- Y. M. C. A. Men of both faculty and student-body meet for Tuesday noon luncheon and fellowship at the Joplin Y. M. C. A. Varied programs of entertainment and inspiration are arranged by a student committee.
- Y. W. C. A. The Young Women's Christian Association, organized in 1938, endeavors to be of service to the women students of the College. It is a comradeship in which every woman of the college may share and offers an opportunity for development and training in leadership, religion, and social service. The activities of the Y.W. C. A. are varied enough so that each member may do the type of

work that appeals most to her interest. Each member is given an opportunity to do as much work as she desires.

A group of delegates attends the fall and spring conferences of the Y. M. C. A. and Y. W. C. A. and the regional Conference at Hollister during the summer.

The Joplin Junior College Players is organized for the purpose of promoting interest in dramatic productions. With this purpose in mind the members produce two plays during the school year, and contribute materially to assemblies and other school functions. Membership includes not only those who have met special requirements and shown ability in acting, but students in any field of dramatic work. Make-up, costuming, set designing, publicity management, and stage direction are other phases which are studied by this organization.

Teachers of Tomorrow, the education club of the college, is for prospective teachers only. All members of the education department who are doing satisfactory work are eligible for membership. The purposes of the organization are to promote professional spirit among its members and to aid all school activities which are for the best interest of the college.

Debate and Speech. The ultimate purpose of higher education is to develop the ability to think. No school activity is better adapted to this purpose than debate and public speech. The College is a member of the Missouri Junior College Forsenic Association and is the Missouri Gamma Chapter of Phi Rho Pi, national honorary forensic fraternity for junior colleges.

The Joplin Junior College Speech Festival for high schools has been highly successful in the past, is an annual affair.

The College aspires to assume a position of leadership in the field of speech.

Sororities, Fraternities, and College Organizations. The sororities and fraternities of the College offer additional social life for the students. Likewise all other clubs of the school are solely interested in making a full college life.

RULES FOR SORORITIES, FRATERNITIES, AND CLUBS

1. All clubs or organizations composed of Junior College students, and recognized by the Faculty as college organizations shall submit a constitution for the approval of the Faculty.

- 2. Membership in these clubs is limited to regularly enrolled students in Joplin Junior College. No student deficient in scholarship or citizenship may become an active member, or remain such, if he later becomes deficient.
- 3. All clubs shall have a member of the Junior College Faculty as sponsor.
- 4. No student may belong to two social clubs at the same time.
- 5. No student may break his or her membership with one organization and seek membership in a like organization until one semester has elapsed from the time he or she has dropped affiliation with the first group.
- 6. Regular meetings may be held bi-weekly in the college building, the home of one of the members, or in such other place as the Sponsor and Dean may approve.
- 7. The regular meeting shall be registered in the office of the Dean.
- 8. Regular meetings shall adjourn not later than 10 p.m.
- 9. Social gatherings are to be held on Friday or Saturday nights, unless permission is obtained from the Dean's office to be held at another time. These gatherings shall be adjourned not later than 11 p.m. on a midweek date, and 11:30 on Friday or Saturday nights.
- 10. Dates for all social meetings shall be placed on the calendar with permission of the Dean.
- 11. Rushing in the Fall shall be completed by the end of the third week of the semester.
- 12. Not more than two date affairs, only one of which may be a formal dance, may be held each semester by a single organization No student organization which in any way represents the Junior College before the public or which holds itself to be an organization of Junior College students, may use the name of the Junior College in connection with its name, or in connection with its members as students without the proper faculty or administrative committee.

Regulations, Grades, Degrees

Course Numbers: In general the courses with small numbers are the beginning courses. The number of hours of credit given for a course is indicated after the title and explanation of each course. The small letters indicate the semester or semesters in which the course is offered; "f" designates a course offered in the fall semester, "w" the winter session, and "s" the summer session.

Vocational Courses: In general, the terminal college classes are conducted on a three-hour, five-day week basis providing 7½ hours credit each semester with the remainder of the day being spent in

related college courses.

Schedule of Courses: The schedule of days, hours, and rooms for the 1947-1948 sessions will be issued as a separate bulletin at least one month in advance of the various sessions.

Definition of Credit Hours: The hour, which is the unit of credit given in the College, is the equivalent of a subject pursued one period per week for one semester of eighteen weeks. Thus a course valued at two credit hours will meet two hours per week for a semester, etc.

Number of Hours: Sixteen hours of work in addition to physical education is the maximum number of hours any student may carry except those students enrolled in Pre-Engineering Curriculum who may carry seventeen or eighteen hours of work, if they register in the Office of the Registrar the name of the school which they plan to attend during their last two years. The approval of that school must be recorded.

Required Work in Physical Education: All men and women students are required to take four semesters of physical education. However, veterans are excused from the Physical Education requirements.

Grading of Students: The following marks are used in grading work: E, S, M, I, F. These are defined as follows: The grade of E indicates rank among the few most excellent students; that of S, rank among the superior students; the grade of M, rank among medium students. The grade of I means that a student is somewhat below average, and the grade of F that he has not accomplished the minimum necessary for passing the subject. If an Incomplete is placed on a grade card, the student must remove the Incomplete within two weeks of the close of the semester in which he received the Incomplete or a grade of "F" is automatically substituted for the Incomplete.

Scholastic Requirements: A student must maintain an average of M on all work carried throughout his college years. If a student

has an average of I, he may continue in school but may not be an applicant for a degree. If a student has an average below an I at the end of his second semester he is not allowed to re-enroll in College, for at least one semester. The average of each student is figured on the basis of the number of hours of credit and the number of honor points. The honor points allowed for each grade are as follows:

E	3 honor points per credit
S	2 honor points per credit
M	1 honor point per credit
I	0 honor points per credit
F	-1 honor point per credit

Requirements for Participation in School Activities: To be eligible for participation in contests for the College, students must be doing passing work in at least ten hours.

To be eligible for participation in athletics, students must have passed in at least ten hours in the preceding semester in school.

Degrees and Diplomas: These are conferred at the close of the second semester of each school year and at the close of the summer session, if a sufficient number of students qualify.

To be eligible for graduation the student must complete the requirements of his curriculum and must have accumulated at least 60 hours of credit with an average of M (60 honor points) and two years of physical education. First Honors go to those graduates who have a 2.7 average or above; Second Honors to those who have 2.4 to 2.7 and Third Honor to those who have 2 to 2.4 average. A 60-hour State Certificate, permitting the student to teach elementary or rural schools of Missouri, is also granted those students who complete the Teacher-Training Curriculum for the Elementary Level. The type of degree for each curriculum is listed with the information pertaining to that curriculum.

Changes in Programs: During the second and third weeks of each term a student may petition for a change in program in the Office of the Registrar.

After the third week of a term no student with a grade of F may withdraw from a course and receive a W (withdrawal).

From the fourth week through the sixth week students who are passing must have the permission of the Dean of the College for withdrawal from a course.

If a student withdraws from a class after the sixth week a grade of F is recorded.

All changes must be recorded in the office and any irregularity in procedure may mean an F on the record of the student involved.

Attendance Regulations: Matters of attendance are handled by the Dean of Women and Dean of Men. Irregular attendence on the part of the student tends to hamper his progress.

A student is allowed the same number of absences per each hour of credit in each of his courses (three absences for a 3-hour course, etc.) without materially affecting his record. Absences in excess of this number may penalize the grade received for the course. This penalty will be rendered by recording an F for each absence. These F's, so accumulated, will be averaged with his other grades and will automatically lower that grade. In no instance will a student be allowed to turn in daily work to make up for the F recorded; however, he should study the material in order to take the tests.

Should a test or examination be missed, if the instructor approves, the student may take the test after paying his 50 cents fee and have a modified grade recorded for the test.

In case of illness, extending through two consecutive absences, report to the Dean of Women or the Dean of Men who may intervene for modification of the penalized grade of F.

Each absence before and after a holiday will be counted as two absences. Students who miss classes while officially representing the school are not counted absent but are excused and may make up any school work missed.

SECTION II

Arts and Science Courses

All courses listed below are accepted toward the A.B. or B.S. degree and also are used in satisfaction of the requirements of those professional schools requiring two years of liberal arts work for admission. Courses in Applied Music and Art are accepted toward the A.B. or B.S. degree to the extent of eight hours.

Total number of hours offered in each subject is shown below:

rotal number of nours offere	d in each subject is shown below:
English Composition and	Introduction to Philosophy 3 hours
Rhetoric 6 hours	Hygiene 2 hours
Foreign Language 55 hours	Art
European History 15 hours	Music Theory 16 hours
American History 5 hours	English Literature 10 hours
Algebra and Trigonometry 5 or 7 hours	Physics 20 hours
Biological Science	Analytic Geometry 5 hours
Chemistry 23 hours	Calculus, Differential
Speech	and Integral 10 hours
Psychology (General and	Physical Education, required 4 hours
Educational) 6 hours	The Family
Geography 3 hours	General Sociology 3 hours
Life and Literature of Old	Economics 5 hours
and New Testament 6 hours	Mechanical Drawing 6 hours
Elementary Logic 3 hours	Accounting

Terminal Courses

Courses in this list are regarded as professional or technical in character and usually are not counted for credit toward a liberal arts degree. These courses are credited, however, in those divisions and curricula where such courses are acceptable.

Business Law	Business Arithmetic 3 hours
Shorthand 12 hours	Typewriting 12 hours
Secretarial Procedures 3 hours	Office Machines 6 hours
Elementary School Organization	Technique of Teaching 3 hours
and Management 2 hours	Teaching of Arithmetic 3 hours
Observation and Practice	Public School Music 2 hours
Teaching in the Elementary	Band 0 hours
School	Applied Music after 8 hours
Children's Literature 2 hours	Plane Geometry
Solid Geometry 3 hours	Vocational Shop Courses All Hours
	Offered

Arts and Science Curriculum

Degree: Associate in Arts

1. Entrance requirements:

The minimum requirements for regular admission to any curriculum in the college call for 15 units earned in an acceptable high school. To be admitted to the Arts and Science Curriculum at least 11 units must be in non-vocational subjects and not more than 4 units in vocational subjects. The following units are required of registrants in Arts and Science:

	3	units
Algebra	1	unit
Geometry	1	unit
History	1	unit
*Foreign Language (in 1 lang.)	2	units

^{*}Two units of either history or science may be offered as a substitute for the language units.

2. Courses required for the Arts and Science Curriculum:

English Composition and Rhetoric .. 6 semester hours Fundamentals of Speech ______2 semester hours Foreign Language (Unless 2 units of the same language studied in college, in which case only the second course of the language is required.) 10 semester hours Algebra 3 semester hours Logic (as Sophomore) 3 semester hours Courses distributed in fine arts, literature, and philosophy, with no more than six hours in any one of these three fields. _____ 10 semester hours Courses distributed among economics, geography, history, political science, and sociology, with no more than one course in any one department. 10 semester hours Biological Science 5 semester hours Physical Science 5 semester hours Electives in Arts and Science Courses _____ 11 or 6 semester hours Physical Education 2 years

3. Total of grades on courses required for Arts and Science must average an M. A candidate for a degree from this department must have a total of at least 60 semester hours, 60 honor points, and two years of physical education.

Pre-Agricultural Curriculum

Degree: Associate in Arts

1. Entrance requirements:

A total of 15 units from an acceptable high school must be presented. These units must include the following:

English	3	units
Math	2	units
Social Studies	1	unit
Science (One unit in Voca-		
tional Agriculture		
acceptable as science.)	1	unit

2. Courses required in Pre-Agricultural Curriculum:

English Composition and Rhetoric 6 semester hours
Mathematics 5 semester hours
Chemistry 5 semester hours
Botany 5 semester hours
Zoology 5 semester hours
Physics 5 semester hours
Economics 5 semester hours
Sociology
Speech (Fundamentals and Public
Speaking) 5 semester hours
Psychology6 semester hours
Electives (Subjects in department
of Math, Physics, Chemistry.) 12 semester hours
Physical Education2 years

3. Total of grades on courses required for Pre-Agriculture must average an M . A candidate for a degree from this department must have a total of at least 60 semester hours, 60 grade points, and two years of physical education.

Pre-Business Administration Curriculum

Degree: Associate in Arts

1. Entrance requirements:

A total of 15 units from an acceptable high school including not more than 4 units in vocational subjects. The following units are required:

English	3	units
Algebra	1	unit
Geometry	1	unit
History	1	unit
Natural Science	1	unit
Foreign Language (in 1 lang.		
or 2 units of either hist-		
tory or science.)	2	units

2. Courses required in Pre-Business Administration:

English Composition and Rhe	etoric 6 semester hours
Algebra	5 semester hours
Economics	3 or 5 semester hours
Accounting	6 or 9 semester hours
United States Government	5 semester hours
Electives	30 semester hours
Physical Education	2 years

Suggested electives should be chosen from the following: Chemistry, Botany, Zoology, Mathematics, Literature, Speech, Sociology, Geography, Psychology, History and Logic.

3. Total of grades on courses required for Pre-Business Administration must average an M. A candidate for a degree from this department must have a total of at least 60 semester hours, 60 honor points, and two years of physical education.

Pre-Dental Curriculum

Degree: Associate in Arts

1. Entrance requirements:

An applicant must present 15 units of credit by examination or by certificate from an approved high school. These units must not include more than 4 units in vocational work and must include the following:

English	3	units
*Foreign	Language (in 1 lang.) 2	units
History		unit
Algebra	1	unit
Science	1	unit

^{*} Two units of either history or science may be offered as a substitute for the language units.

2. Courses required for Pre-Dental Curriculum:

English Composition and Rhetoric 6	semester	hours
Algebra and Trigonometry	5 semester	hours
Inorganic Chemistry	3 semester	hours
Organic Chemistry	semester	hours
Zoology 10) semester	hours
Physics	semester	hours
*Foreign Language1	semester	hours
Electives 8-3	semester	hours
Physical Education2	years	

^{*}Foreign language is not required by all schools; therefore, the Joplin Junior College will not require Foreign language if the particular school our candidate plans to attend does not require it.

3. Total of grades on courses required for Pre-Dental Curriculum must average a grade of M. A candidate for a degree from this department must have a total of at least 60 semester hours, 60 grade points, and two years of physical education.

Pre-Engineering Curriculum

Degree: Associate in Science

1. Entrance requirements:

An applicant must present 15 units from an approved high school; not more than 4 units in vocational subjects will be accepted. The following units are required:

*Students who are unable to offer the three units in Mathematics specified above and wish to enter the Pre-Engineering Curriculum may do so conditionally. This condition may be removed by earning additional credits (not to be applied toward graduation) in Plane Geometry and Solid Geometry. These two courses are offered during the year especially to aid students who have deficiencies. In no instance is any credit toward graduation, allowed on these courses.

2. Courses required are:

English Composition and Rhetoric 6	semester hours
Algebra and Trigonometry 5	semester hours
Analytic Geometry 5	semester hours
Differential Calculus 5	semester hours
	semester hours
**Plane Surveying2	semester hours
	semester hours
English Literature	semester hours
Speech 3	semester hours
Physical Education 2	years

*Required of students majoring in Chemical Engineering.

- 3. Specific grade requirements in the Pre-Engineering Curriculum are: A minimum grade of M in Algebra and Trigonometry-3, or General Mathematics-1 and Trigonometry-2; also, a minimum grade of M in Chemistry-1. A student, who makes a grade of I on any of the courses specified, must repeat the course with no credit being allowed and half the normal amount of honor points.
- 4. Total of grades on courses required of Pre-Engineering must average a grade of M. A candidate for a degree from this department must have a total of at least 60 semester hours, 60 honor points and two years of physical education.

^{**}Required of students majoring in Civil Engineering and used by others as an elective.

Pre-Journalism Curriculum

Includes preparation for Editorial Curriculum, Advertising Curriculum, Publishing Curriculum, and non-technical Radio Curriculum.

Degree: Associate in Arts

1. Entrance requirements:

An applicant must present 15 units of credit from an approved high school. Not more than 4 units of vocational work will be accepted and the following units are required:

English 3 units
Algebra 1 unit
Geometry 1 unit
History 1 unit
Natural Science with laboratory1 unit
Foreign Language (or 2 units
of either history or science) 2 units

2. Courses required for Pre-Journalism Curriculum:

English Composition and Rhetoric 6 semester hours Foreign Language (in 1 language) 15 semester hours Biological Science or Physical

5 s	emester	hours
5 s	emester	hours
3 s	emester	hours
5 s	semester	hours
6 s	emester	hours
12 s	emester	hours
	5 s 3 s 5 s 6 s 3 s	5 semester

3. Total of grades on courses required of Pre-Journalism Curriculum must average an M. A candidate for a degree from this depart-

ment must have a total of at least 60 semester hours, 60 honor

points, and two years of physical education.

Pre-Law Curriculum

Degree: Associate in Arts

1. Entrance requirements:

An applicant must present 15 units of credit from an approved high school. Not more than 4 units of vocational work will be accepted and the following units are required:

English	3	units
Algebra	1	unit.
History	1	unit
Natural Science	1	unit
*Foreign Language (in 1 lang-		
uage)	2	units

^{*} Two units of either history or science may be offered as a substitute for the language units.

2. Courses required for Pre-Law Curriculum:

English Composition and Rhetoric 6 semester hour	S
English Literature 6 semester hour	S
Algebra or Logic 3 semester hour	S
*Foreign Language (in 1 language) 15 semester hour	S
Biological Science or Physical	
Science 5 semester hour	S
United States Government 5 semester hour	S
Economics 5 semester hour	
European History 3 semester hour	S
Accounting 6 semester hour	S
*Electives 6 semester hour	S
Physical Education	

^{*}Students who present 2 units in the same language continued in college need take only the intermediate and one advanced course in that same language, or a total of 10 hours. Students with 2 units may not take the beginning course in the same language for college credit.

^{**}Suggested electives are: American History, Philosophy, Psychology, Sociology, or more science.

^{3.} Total of grades on courses required of Pre-Law Curriculum must average an M. A candidate for a degree from this department must have a total of at least 60 semester hours, 60 honor points, and two years of physical education.

Pre-Medical Curriculum

Degree: Associate in Arts

1. Entrance requirements:

An applicant must present 15 units of credit from an approved high school. Not more than 4 units may be in vocational subjects and the following units must be included:

English	3	units
	1	unit
Geometry	1	
History	1	unit
Science	1	unit
*Foreign Language (in 1 lang.)	2	units

^{*}Two units of either history or science may be offered as a substitute for the language units.

2. Courses required for Pre-Medical Curriculum:

English Composition and Rhetoric 6	semester	hours
Algebra and Trigonometry 5	semester	hours
*French or German (in 1 lang.) 15-20	semester	hours
General Inorganic Chemistry 10	semester	hours
Chemical Analysis	semester	hours
Zoology 10	semester	hours
Physics	semester	hours
Electives 3	semester	hours
Physical Education	2 years	

^{*}If two years of either language are offered from high school, the minimum requirement in this language will be reduced to 10 semester hours.

Suggested courses for electives: English Literature, History, Sociology, Psychology, Botany, Quantitative Analysis and Organic Chemistry.

3. Total grades in courses required for Pre-Medical Curriculum must average a grade of M. A candidate for a degree from this department must have a total of 60 semester hours, 60 grade points, and two years of physical education.

Pre-Nursing Curriculum

Degree: Associate in Arts

1. Entrance requirements:

An applicant must present 15 units of credit by examination or by certificate from an approved high school and must include the following required units:

English		3	units
*Foreign	Language (in 1 lang.)	2	units
History		1	unit
Algebra		1	unit
Natural	Science	1	unit

*Two units of either history or science may be offered as a substitute for the language units. One unit in chemistry and biology is strongly recommended. One in physics and one in typewriting will be found useful. The remaining units may be in various subjects, but not more than 4 will be accepted in vocational subjects.

2. Courses required for Pre-Nursing Curriculum:

English Composition and Rhetoric	6 6	semester	hours
Chemistry	_ 10	semester	hours
Zoology	. 10	semester	hours
European History	6	semester	hours
Philosophy (or Logic)	3	semester	hours
Sociology	3	semester	hours
Speech	2	semester	hours
Psychology	6	semester	hours
French or German	10-20	semester	hours
Physical Education	2	years	

3. Total of grades required for Pre-Nursing Curriculum must average a grade of M. A candidate for a degree from this department must have a total of 60 semester hours, 60 grade points and two years of physical education.

Applied Music Curriculum

Degree: Associate in Music

1. Entrance requirements:

An applicant must present 15 units of credit from an approved high school. Not more than 4 units of vocational work will be accepted and the following units are required:

English		3	units
Algebra	(or General Math.)	1	unit
History	(<u></u>	1	unit
	Science	1	unit
*Foreign	Language (in 1 lang.)	2	units

^{*}Two units of either history or science may be offered as a substitute for the language units.

2. Courses required in Applied Music Curriculum:

English Compo	osition and R	hetoric 6	semester	hours
Speech		2	semester	hours
*Foreign Langu	age	15	semester	hours
Algebra		3	semester	hours
Logic		3	semester	hours
Introduction to	o Music	6	semester	hours
Harmony		6	semester	hours
Music Literati				
Modern Europ	ean History	3	semester	hours
English Liter	ature	6	semester	hours
Music Major,				
	Violin,	etc 4	semester	hours
Electives		7 or 2	semester	hours

^{*}Unless 2 units, from high school in the same language, are presented, in which case only 10 semester hours are required, no credit is allowed for the beginning course of the same language if two units are presented.

3. Total of grades on courses for Applied Music Curriculum must average an M. A candidate must have a total of at least 60 semester hours, 60 honor points, and two years of physical education.

Teacher Training Curriculum For Elementary Level

Degree: Associate in Education

1. Entrance requirements:

a. A total of 15 units, with an average of M, from an approved high school must be presented. Not more than 4 units of vocational work will be accepted and the following units should be included:

English3 unitsMathematics1 unitSocial Studies1 unitScience1 unit

- b. An applicant must be free from gross physical defects which would make his success as a teacher unlikely. Speech impediments or highly neurotic conditions will necessarily need to be cured before admittance.
- 2. Courses required for Teacher-Training Curriculum for Elementary Level:

English Composition and Rhetoric 6	semester	hours
History, American5	semester	hours
acography	semester	
Science, Zoology or Botany 5	semester	hours
Hygiene2	semester	hours
Art 2 or 3	semester	hours
Public School Music2	semester	hours
United States Government	semester	hours
Children's Literature2	semester	hours
Psychology, General and Educational 6	semester	hours
Elementary School Organization 3	semester	hours
Technique of Teaching 3	semester	hours
Observation and Practice Teaching 3	gomogton	hours
Toolsing of Asill	semester	nours
Teaching of Arithmetic 3	semester	hours

*A student must make an M in any education course before taking the next required course. A student, who makes a grade of I in any education course specified, must repeat the course with no credit being allowed and half the normal amount of honor points for the grade on the repeat.

**No student will be allowed to do practice teaching in the public schools of Joplin who has not had the course in technique of teaching in residence.

3. Total of grades on courses required for Teacher-Training Curriculum for Elementary Teachers must average an M. A candidate for a degree from this department must have a total of at least 60 semester hours, 60 honor points, and two years of physical education.

Teacher Training Curriculum For Secondary Level

Degree: Associate in Arts

1. Entrance requirements:

A total of fifteen units from an approved high school must be presented. Not more than 4 vocational units will be accepted and the following units are required:

English		3	units
Algebra		1	unit
History		1	unit
Natural	Science	1	unit
*Foreign	Language (in 1 lang.)	2	units

2. Courses required for Teacher-Training for Secondary Level:

These requirements depend entirely upon what the student chooses as his major and minor subjects. In order to be sure a student is choosing his courses in the most advantageous way, the entire four-year curriculum is listed below. A student may take his first two years in the Joplin Junior College, working off most of his general requirements, and half of the number of hours for both the major and minors. To be eligible for graduation from Joplin Junior College the student must complete in full numbers 3 and 4 of the general requirements and enough hours from his major and minor subjects to total at least 60 semester hours.

Specific State Requirements for High School Teachers in Different Teaching Fields:

Secondary Teachers

Junior high-school teachers must meet the same standards as senior high-school or four-year high-school teachers. All hour requirements are stated in terms of semester hours. The academic standards and the standards for approval in special teaching fields have been formulated in terms of the patterns for the secondary-school curriculum.

General Requirements

- 1. A baccalaureate degree from an accredited college or university.
- 2. Completion of sufficient college work in two subject-matter fields to meet the standards for certification and approval for a teacher in a first-class high school.

- 3. A total of twenty-five hours of college work which may be selected from a minimum of three of the following fields: English composition, literature, social studies, mathematics, natural sciences, and foreign languages.
- 4. Two years of college work in general physical education and health.

Professional Requirements

Not less than eighteen hours, and it is strongly recommended not more than thirty hours, of undergraduate work in professional education courses including a course in each of the following:

Group One—Orientation

- 1. Educational psychology
- 2. A general orientation course, such as history or philisophy of education.

Group Two-Methods

- 1. General techniques or methods in high-school teaching
- 2. Special techniques in on teaching field
- 3. A general administration course for teachers

Group Three—Teaching

1. Student or apprentice teaching (5 hours)

Special Requirements for Teachers in First-Class High Schools

1. Language Arts

- a. English _______24 hours Including at least 5 hours in composition, 5 hours in English literature, 5 hours in American literature, and 2 hours in speech.
- b. School Publications
 Twenty-four hours in English with at least 5 hours of college work in school publications (not more than 5 hours in school publications may be counted as a part of the total of 24 hours required to teach English).
- d. Foreign Languages
 Twenty hours in each language taught.

2. Social Studies

All teachers of social studies must have at least twenty-four hours in this area including at least one course each in American history, European history, economics, government, and sociology. Teachers of American history and world history must have at least 7 1-2 hours in each of these subjects taught, and teachers of economics, sociology, and government must have at least 5 hours in each of these subjects taught.

Teachers of geography must have five hours in geography which may be counted as a part of the twenty-four hours required.

- 3. Mathematics ______ 15 hours
- 4. Natural Science 24 hours

Including at least 15 hours in each science taught; provided that teachers of general science and advanced physical science shall have at least 5 hours of work each in chemistry, physics, and biology, or 10 hours in college general science as a part of the total of 24 hours required in science.

5. Fine Arts

- a. Music
 - (1) Full-time teachers 24 hours
 - (2) Part-time teachers _______ 15 hours Including conducting, history or appreciation, and sight singing or ear training.
- b. Art
 - (1) Full-time teachers 24 hours
 - (2) Part-time teachers ______ 15 hours
- c. Dramatics

Twenty-four hours in English with at least 5 hours of work in dramatics.

6. Practical Arts

- a. Home Economics
 - (1) Vocational to be approved by state supervisor
- b. Agriculture
 - (1) Vocational to be approved by state supervisor

c. Commerce

- (1) Full-time teachers _____ 24 hours
- (2)Including at least 7 1-2 hours of work at the college level in the subject taught for teachers of shorthand, typewriting, or bookkeeping; the first 5 hours of this requirement may be met by passing satisfactorily a proficiency examination in the subject taught, the examination to be administered by an accredited college or university that offers a teacher-training program in business education including the subject in which the examination is given. The teacher of business law shall have at least 5 hours in this subject. Teachers of other business subjects shall have at least 15 hours of work distributed over the field of business, exclusive of shorthand and typewriting. Qualified teachers of English and mathematics may be approved to teach business English and business arithmetic respectively.

d. Industrial Arts

- (1) Vocational to be approved by state supervisor

7. Health and Physical Education

- a. Full-time teachers ______24 hours

8. Librarians

- 3. Total of grades on courses required for Teacher-Training Curriculum for Secondary Teachers must average an M. A candidate for a degree from this department must have a total of at least 60 semester hours, 60 honor points, and two years of physical education.

General Business Curriculum

Degree: Associate in Business

Part A

Secretarial Curriculum A

1. Entrance requirements:

A total of 15 units from an approved high school must be presented and must include the following:

English 3	units
Mathematics1	unit
Social Studies	unit
Science1	unit
Typewriting2	units
Shorthand1-2	units

2. Courses required in Secretarial Curriculum A which is designed for those who have had some training in the business field:

English Composition and Rhetoric	6	semester	hours
Shorthand	9	semester	hours
Typing	9	semester	hours
Accounting			
Office Machines	6-3	semester	hours
Secretarial Procedures	3	semester	hours
Economic Geography	3	semester	hours
Business Arithmetic	3	semester	hours
Business Law	3	semester	hours
Electives	9-15	semester	hours
Physical Education	2	years	

3. A total of grades in courses required of Secretarial—Curriculum A must average an M. A candidate for a degree in this field must present at least 60 semester hours and 60 honor points, and two years of physical education.

Part B

Secretarial Curric	ulum	В
--------------------	------	---

1. Entrance requirements:

A total of 15 units from an approved high school must be presented and must include the following:

English	3	units
Mathematics	1	unit
Science	1	unit
Social Studies	1	unit

2. Courses required in Secretarial Curriculum B which is designed for those who have no training in the business field:

English Composition and	Rhetoric 6 semester hours
Shorthand	12 semester hours
Typing	12 semester hours
Accounting	9-6 semester hours
Office Machines	6-3 semester hours
Secretarial Procedures	3 semester hours
Business Arithmetic	3 semester hours
Economic Geography	3 semester hours
Business Law	3 semester hours
Electives	9-15 semester hours
Physical Education	2 years

Note: Electives in both Curricula should include: General Psychology, Fundamentals of Speech, Literature, and possibly a science.

3. A total of grades in courses required of Secretarial—Curriculum B must average an M. A candidate for a degree in this field must present at least 60 semester hours, 60 honor points, and two years of physical education.

General Culture Curriculum

Diploma

1. Entrance requirements:

sented.

A total of 15 units from an acceptable high school must be pre-

2. Courses required for the General Curriculum:

English Composition	and Rhetoric 6	semester	hours
English Literature	4-6	semester	
History	6	semester	hours
Sociology	3	semester	hours
Elementary Logic	3	semester	hours
Speech	2	semester	hours
Electives		semester	hours

3. Total of grades on courses required for General Culture Curriculum must average an M. A candidate for a diploma from this department must have a total of at least 60 semester hours, 60 honor points, and two years of physical education.

Terminal Vocational Shops Curriculum

Diploma

1. Entrance requirements:

A total of 15 units from an acceptable high school must be presented.

2. Courses required for the Terminal Vocational Shops Curriculum:

English Composition and Rhetoric 6	semester	hours
Mathematics 5	semester	hours
Elemetary College Physics	semester	hours
General Sociology 3	semester	hours
American History or United States		
Government 5	semester	hours
Elective3	semester	hours
Shops (one-half of each day,		
$7\frac{1}{2}$ hours per semester)	semester	hours

3. Total of grades on courses required for Terminal Vocational Shops Curriculum must average an M. A candidate for a diploma from this department must have a total of at least 60 semester hours, 60 honor points, and two years of physical education.

SECTION III

Commerce

1. GENERAL BUSINESS

Accounting I (f and s). Fundamental principles as applied in modern business practice. 3 hours.

Accounting II (f and w). Advanced course open to students by special permission of intructor. 3 hours.

Accounting 12 (f and w). Prequisite, Accounting 11. Application of accounting principles to problems of the single proprietor, partnerships, and corporate forms of business organization. 3 hours.

Business Law 30 (w). Study of the common rules and legal principles used in business procedure. 3 hours.

Business Arithmetic 7 (f or w). Required for secretarial curriculum. 3 hours.

Economics 8 (f and w). (See under SOCIAL SCIENCES.)

2. SECRETARIAL

Shorthand 3 (f). Beginning Shorthand. Not open to students who have completed one year of high school. except by permission of instructor. Typewriting should precede or parallel this course. 3 hours.

Shorthand 4 (w). Intermediate Shorthand. Prerequisite, Shorthand 3, one year year of high school shorthand, or by permission of instructor. 3 hours.

Shorthand 13 (f and w). Advanced Shorthand. Prerequisite, Shorthand 4 or two years of high school shorthand. Special attention to speed, dictation and transcription 3 hours.

Shorthand 33 (f and w). Advanced Shorthand. Prerequisite, Shorthand 13. Speed dictation and transcription for advanced students. Admission to this course by special permission of instructor. 3 hours.

Typewriting 5 (f and s). A beginning course. Not open to students who have completed one high school unit of typewriting, except by special permission of the instructor. 3 hours.

Typewriting 6 (f or w). Intermediate Typewriting. Prerequisite, Typewriting 5 or one year of high school typewriting. 3 hours.

Typewriting 15 (f or w). Advanced Typewriting. Prerequisite, Typewriting 5 or two years of high school typewriting. 3 hours.

Typewriting 16 (f or w). Advanced Typewriting. Prerequisite, Typewriting 15. Preparation of personal, business and professional papers and forms including difficult tabulations. 3 hours.

Secretarial Procedures 21 (f or w). No prerequisite. Business ethics, secretarial duties common to all lines of business, such as handling mail, meeting callers, and using the telephone are studied. The student receives instruction in the use of present day filing systems and their application to the various types of business. 3 hours.

Office Machines 20 (f or w). Prerequisite, Typewriting 6 or two years of high school typewriting. Training in the use of modern office appliances. 3 hours.

Advanced Office Machines 35 (w). Prerequisite, Office Machines 20. Work may include use of the teletypewriter, if student desires. 1, 2, or 3 hours.

Education

General Psychology 1 (f or w). Principles which control individual human behavior. 3 hours.

Educational Psychology 2 (f or w). Prerequisite, General Psychology 1 or a biological science. Application of methods and results of experimental psychology to the learning situation in elementary schools. 3 hours.

Elementary School Organization and Management 5 (f). Major problems of organization and management of both materials and people, from the rural and elementary school point of view. 3 hours.

Technique of Teaching in Elementary Schools 11 (f). Prerequisite, Educational Psychology 2. Techniques and practices in the elementary school, followed by a survey of curriculum "areas" and the Missouri Courses of Study for Elementary Grades. 3 hours.

Teaching of Arithmetic in the Elementary School 12 (w). Prerequisite, Educational Psychology 2 and Technique of Teaching in Elementary Schools 11. Review of arithmetic, followed by study of methods of teaching to elementary pupils. 3 hours.

Observation and Practice Teaching in the Elementary School 16 (w). Prerequisite, Educational Psychology 2 and Technique of Teaching in Elementary Schools 11. Includes practice in schools of Joplin and Jasper County. 3 hours.

Fine Arts

1. ARTS

Art Survey 1 (f and s). Study of history, materials and methods of creative art. 3 hours.

Art Survey 1 a (f and s). Study of history, materials and methods of creative art as used by elementary teachers. 2 or 3 hours.

Art Composition 2 (w and s). Prerequisite, Art Survey 1. Elementary training in drawing and color combinations. 3 hours.

Art Composition 3 (f). Prerequisite, Art Composition 2. Study of pictorial organization. 3 hours.

Art Composition 4 (w). Prerequisite, Art Composition 3. Creative Art. 3 hours.

2. MUSIC

Introduction to Music 1 (f). Survey of basic elements in music. 3 hours.

Introduction to Music 2 (w). Prerequisite, Introduction to Music 1. Attention to harmonic writing and composition of original chorales. 3 hours.

Public School Music 5 (f or w). For elementray education majors. Includes survey of compositions useful in music appreciation. 2 hours.

Elementary Harmony 11 (f). Emphasis on conventional nineteenth century styles. 3 hours.

Advanced Harmony 12 (w). Attention to twentieth century harmonic developments. 3 hours.

Musical Literature 13 (f). Historical survey of the development of music correlated with other cultural factors. 2 hours.

Musical Literature 14 (w). Continuation of Musical Literature 13, with special attention to the movements of the twentieth century. 2 hours.

Orchestra 21, 22 (f and w). Includes work on standard symphonic compositions. 1 hour each semester.

Band 23, 24 (f and w). Attention to band contributions to various types of public gatherings.

Chorus 25, 26 (f and w). Members become acquainted with masterpieces of choral music. Emphasis on public performance for community service. 1 hour each semester.

3. APPLIED MUSIC

Students may be enrolled for work in cello, organ, piano, violin and voice. Students shall receive college credit, under the following requirements:

The fee for the semester will be paid in advance at the Junior College office. Lessons will be given at the college unless special arrangements are made with the Dean, in which case they may be given at the studio of the instructor.

Lessons will be forty minutes in duration once each week.

The prerequisites for college credit in applied music are: piano, two years; organ, two years; violin, two years; voice, one year and one year piano.

Voice. (1f and 2w). Fundamental work in breathing, posture, diction and blending of registers. Major and minor scales and arpeggios, within range. Vocalises such as Sieber, Conconne, Abt, Marchesa and Vacai. Simple songs in Italian and English. Credit: One hour each semester.

Voice. (11f and 12). Continuation of fundamental work of the first year. Art songs of English, German and French schools. Recital required. Credit: One hour each semester.

Violin. (1f and 2w). Schradieck Scale Studies, Sevcik Bowing Exercises. Dont Preparatory Exercises, Kreutzer. Solos by Bohm, Tartini, Handel. Concertos of Nardini and De Beriot. Credits: One hour each semester.

Violin. (11f and 12w). Continuation of first year studies. Kreutzer Etudes. Concertos of Vivaldi, Mozart, Sophr. Recital required. Credit: One hour each semester.

Piano. (1f and 2w). Major and minor scales and arpeggios. Technical exercises. Studies of Cramer, Heller, Czerny, Clementi. Bach Two and Three Part Inventions. Sonatas of Haydn and Mozart. Compositions of moderate difficulty of standard composers. Credit: One hour each semester.

Piano. (11f and 12w). Continuation of all technical studies. Octave studies. Bach Suites and Well Tempered Clavicord. Compositions of Beethoven, Chopin, MacDowell, Schumann, Mendelssohn, etc. Recital required. Credit: One hour each semester.

Cello. (1f and 2w). Major and minor scales and arpeggios. Technical exercises of Dotzauer. Pieces of simple grade by Goltermann and Popper. Concertos of Klengle and Goltermann. Credit: One hour each semester.

Cello. (11f and 12w). Continuation of all technical work of the first year. Schultz Thumb position and Scale Studies. Additional pieces of Popper, Goltermann and Saint Saens. Credit: One hour each semester.

Organ. Prerequisite, two years piano. Technique and Registration (manual and pedal). Master Studies by Carl. Repertoire, Bach, Mendelssohn, Guilmont, Franck, modern composers. Credit: One hour each semester.

Liberal Arts And Science

1. BIBLICAL LITERATURE

Life and Literature of the Old Testament 50 (f). Study in the light of historical backgrounds for present spiritual values. 3 hours.

Life and Literature of the New Testament 60 (w). Reading of each book in the light of Greek, Roman and Oriental elements in apostolic times. 3 hours.

2. ENGLISH AND SPEECH

a. COMPOSITION

English Composition and Rhetoric 1 (f or w). Study of and drill in grammar, punctuation, spelling and sentence structure. 3 hours.

English Composition and Rhetoric 2 (f or w). Prerequisite, English Composition and Rhetoric 1. Study of paragraph structure, and of exposition, description and narration. 3 hours.

b. LITERATURE

English Masterpieces 3 (f). Survey of lyric and narrative poetry, formal and informal essays, drama biography, short story and novel. 2 hours.

English Masterpieces 4(w). Similar to English Masterpieces 3, but independent of it. 2 hours.

English Life and Literature 11 (f). Prerequisite, English Composition and Rhetoric 1 and 2, or Sophomore standing and English Composition 2 concurrently. Survey of English literature in the light of English history. 3 hours.

English Life and Literature 12 (w). Prerequisite, English Conposition and Rhetoric 1 and 2 or Sophomore standing and Eng-Composition and Rhetoric 2 concurrently. Continuation of English Life and Literature 11 but independent of it. 3 hours.

Children's Literature 13 (w). Prerequisite, English composition and Rhetoric 1 and 2. Open only to Sophomores in elementary teacher training. Survey of literature taught in elementary schools. 2 hours.

c. SPEECH

Fundamentals of Speech 5 (f and w). Training for proficiency in use of voice, in diction and stage presence. 2 hours.

Introduction to the Theatre 6 (f). Consideration of contributions to modern dramatic production by directors, actors, designers, playwrights; illustrated lectures; recordings and laboratory work. 2 hours.

Play-Production 7 (w). Practical and esthetic aspects of the amateur theatre. Principles of direction, lighting, stagecraft, makeup. 3 hours.

Speech Technique and Radio Performance 14 (f). Analysis of the voice and articulation problems of each student; main emphasis on study of broadcasting as a special form of public speaking, with consideration of the problems arising from the nature of the radio audience and the conditions of radio listening. 2 hours.

Public Speaking 15 (f). Prequisite, Fundamentals of Speech 5. Practice in preparation and delivery of impromptu, extemporaneous, manuscript and memorized speeches. 3 hours.

Argumentation and Debate 16 (f and w). The theory of argument; research and brief-making; argumentative writing; practice in forensics and debate. 3 hours

Theory and Practice of Literary Interpretation 17 (f or w). Prerequisite, Fundamentals of Speech 5, or one year of high school speech, or special permission of instructor. Emphasis on artistic and creative aspects of oral reading and acting. 3 hours.

3. FOREIGN LANGUAGE

a. FRENCH

Elementary French 1 (f or w). Pronunciation, grammar, vocabulary, idioms, dictation, graded readings, and conversation. 5 hours.

Intermediate French 2 (w). Prerequisite, Elementary French 1 or two years of high school French. Intensive reading of short stories and poems, with emphasis on vocabulary building and conversation. 5 hours.

Advanced French 3 (f or w). Prerequisite, Intermediate French 2. Reading of short stories and modern plays. Practice in composition and conversation. 5 hours.

b. GERMAN

Elementary German 1 (w). Pronunciation, grammer, dictation, memory work, easy reading, and conversation. 5 hours.

Intermediate German 2 (w). Prerequisite, German 1. Grammar review. Reading of literary selections, memorization of poems and songs. Emphasis on the spoken idiom. 5 hours.

Advanced German 3 (w). Prerequisite, German 2. Poems of Goethe. Representative plays of Schiller and Goethe. 5 hours.

c. LATIN

Elementary Latin 1 (f). Beginning Latin for students who have not previously studied any Latin. Training in the elements of the language with easy reading. 5 hours.

Intermediate Latin 2 (w). Prerequisite, Elementary Latin 1 or two years of high school Latin. Connected reading of selections from Caesar's "Gallic War" with intensive study of forms and constructions. 5 hours.

d. SPANISH

Elementary Spanish 1 (f or w). Fundamentals of pronuncition, vocabulary and grammar. 5 hours.

Intermediate Spanish 2 (f or w). Prerequisite, Elementary Spanish 1 or two years of high school Spanish. Reading, conversation and composition. 5 hours.

Advanced Spanish 3 (f or w). Prerequisite, Intermediate Spanish 2, or three years of high school Spanish. Rapid reading of Spanish selections, and intensive drill in conversation and composition. 5 hours.

4. MATHEMATICS

Plane Geometry 0 (f). A short course in plane Euclidean geometry. This course is only for students not offering one unit of plane geometry for entrance. No credit for engineering students. 3 hours.

Solid Geometry 00 (w). A short course in Solid Geometry for students not offering Solid Geometry from high school. No credit for Pre-Engineering students. 2 hours.

Introductory Course in College Algebra 1 (f or w). Prerequisite, one year of high school Algebra. Review of algebraic fundamentals, followed by study of quadratic equations, variations, progressions and a brief introduction to trigonometry. 5 hours for

students presenting one year high school unit in Algebra, 3 hours for students presenting one and one-half units in high school Algebra.

Trigonometry 2 (f or w). Prerequisite, one year of high school plane geometry and General Mathematics 1. Study of trigonometric functions and practical applications. 3 hours for students who present no high school units in trigonometry, 2 hours for students who present credit in high school trigonometry.

College Algebra and Trigonometry 3 (f). Prerequisite, three years of high school mathematics, including one and one-half units in high school algebra and one-half unit in high school Trigonometry. Study of advanced topics in quadratic equations, variations, progressions and trigonometric functions. 5 hours.

Analytic Geometry 4 (w). Prerequisite, College Algebra and Trigonometry 3, or General Mathematics 1 and Trigonometry 2 with a minimum grade of M. 5 hours.

Differential Calculus 5 (f). Prerequisite, Analytic Geometry 4. Fundamentals of differentiation and practical applications. 5 hours.

Integral Calculus 6 (w). Prerequisite, Differential Calculus 5. Advanced theory of differentiation and integration and functions of multiple variables. 5 hours.

Slide Rule 8 (w). A laboratory course in the technique of slide rule manipulation. 1 hour.

Plane Surveying 9 (f or w). Prerequisite, Trigonometry. An introductory course dealing with the fundamental principles of surveying. A study of instruments and some basic field work is included. 2 hours.

5. MECHANICAL DRAWING

Engineering Drawing 1 (f or w). Study of use of drawing instruments, lettering, technical sketching, tracing and blue printing. A. S. A. standards are basis for drafting conventions. 2 hours.

Descriptive Geometry 2 (f or w). Prerequisite, Engineering Drawing 1. Practical applications of principles to problems of geology and mining, and mechanical and architectural engineering. 2 hours.

Engineering Drawing 3 (f or w). Prerequisite, Engineering Drawing 1. Screw thread, bolts and nuts, detail and assembly, gear and cam design, topographical and pattern drafting. 2 hours.

6. NATURAL SCIENCE

a. BIOLOGY

General Zoology 1 (f). General survey of animal groups, followed by detailed study of one vertebrate and of representatives from other groups. 5 hours.

General Botany 2 (w). Study of structure and activities of living plants. 5 hours.

Hygiene 3 (f or w). Study of principles of personal and social hygiene, and public health. 2 hours.

Anatomy and Physiology 5 (w). Prerequisite, General Zoology 1 with minimum grade of M. Includes study of structure of the cell, skeletal and muscular and nervous systems, and introduction to embryology. 5 hours.

b. CHEMISTRY

General Inorganic Chemistry 1 (f and w). Introduction to laws, laborartory and theories of chemistry, and to laboratory precedures. 5 hours.

General Inorganic Chemistry 2 (f and w). Prerequisite, General Inorganic Chemistry 1, with a minimum grade of M. Emphasis on oxidation reduction reactions with laboratory, principles of solubility product and properties of metals. 5 hours with laboratory or 3 hours without laboratory.

Qualitative Analysis 3 (f). Prerequisite, General Chemistry 1 and 2, identification of metals and the more important anions. 3 hours.

Quantitative Analysis 4 (w). Prerequisite, General Inorganic Chemistry 1 and 2, and Qualitative Analysis 3. Includes both volumetric and gravimetric analysis. 5 hours.

Elemetary Organic Chemistry 5 (w). Prerequisite, 8 hours of college chemistry. Designed for pre-medical, pre-nursing, and preagricultural students. 5 hours. Chemical Engineers may take Organic Chemistry without laboratory for 3 hours credit.

c. PHYSICS

Elementary College Physics 1 (f). Prerequisite, Plane Geometry. Includes study of Mechanics, Heat and Sound. 5 hours.

Elementary College Physics 2 (w). Prerequisite, Elementary College Physics 1. Includes study of Electricity and Light. Courses 1 and 2 designed for pre-medical students. 3 hours.

General College Physics 3 (f). Prerequisite, ten hours of college mathematics. Calculus should be taken concurrently. Includes study of mechanics, sound and heat. Courses 3 and 4 for pre-engineering students. 5 hours.

General College Physics 4 (w). Prerequisite, General College Physics 3. Study of electricity and light, followed by introduction to modern applications of physics. 5 hours.

7. PHILOSOPHY

Elementary Logic (f or w). Sophomore standing. Study of laws of correct thinking and of scientific method. 3 hours.

Introduction to Philosophy 2 (w). Inquiry into such problems as the nature of truth, goodness, beauty and the nature of the universe and of human nature. 3 hours.

8. SOCIAL SCIENCE

a. GEOGRAPHY

Introduction to Geography 1 (f or w). Study of climate and natural resources, and modification of the earth's surface by internal and external forces, and their effects on populations. 3 hours.

b. HISTORY

Ancient History 1 (f). Survey of the early civilizations in Egypt, Mesopotania, Palestine and Asia Minor, followed by a survey of the development of Rome through the imperial period. 3 hours.

Medieval History 2 (w). Survey of developments in Europe from the fall of the Roman Empire to the discovery of America. 3 hours.

Modern European History 3 (f). Study of growth of nations, and cultural and political developments from 1492 to 1815. 3 hours.

Modern European History 4 (w). Study of developments in Europe from the Congress of Vienna to the present. 3 hours.

American History 5 (f and w). Survey of political, economic and social developments in the United States of America. 5 hours.

Contemporary Europe 6 (f and w). Survey of problems confronting European society since the war of 1914-1919. 3 hours.

c. POLITICAL SCIENCE

General Economics 8 (f and w). Prerequisite, sophomore standing. A study of the price and value aspects of human activities and institutions. 5 hours.

Government of the United States 11 (f or w). Study of the formation and structure of the Federal Constitution, and of governmental structure in the United States of America. 5 hours.

International Relations 12 (f or w). Study of the theory of International relations with emphasis upon developments since 1919. 3 hours.

Physical Education

REQUIRED COURSES

All men and women students are required to take courses in physical education throughout the first and second years.

- 1-2 Required Course, Freshmen Men (f, w, and s). Two periods each week. The activities offered will be decided by the instructor. Required Credit.
- 3-4 Required Course, Freshmen Women (f, w, and s). Two periods each week. The activities offered will be decided by the instructor. Required Credit.
- 5-6 Required Course, Sophomore Men (f, w, and s). Two periods each week. A continuation of 1-2. Required Credit.
- 7-8 Required Course, Sophomore Women (f, w, and s). Two periods each week. A continuation of 3-4. Required Credit.

Plays and Games 1, For Women (f and s). Activities suitable for the playground, recreation centers, elementary and secondary schools. This course will not substitute for Physical Education. 2 hours.

Plays and Games 2, For Men (f). Activities suitable for the playground, recreation centers, elementary and secondary schools. This course will not substitute for Physical Education. 2 hours.

Vocational Education

1. AUTO MECHANICS

Automotive 1 (f). Automotive machines. 7½ hours.

Automotive 2 (w). Automotive fundamentals, particular attention to chassis and power transmission. $7\frac{1}{2}$ hours.

Automotive 3 (f). Automotive ignition. 7½ hours.

Automotive 4 (w). Automotive maintenance. 7½ hours.

Automotive 5 (f). Automotive body and fender instruction with emphasis on the straightening of fenders, frames, chassis. $7\frac{1}{2}$ hours.

Automotive 6 (w). Specialization in the preparation of the car for painting, and repair of upholstering. $7\frac{1}{2}$ hours.

2. JOINERY

Joinery 1, 2 (f, and w). Instruction in care of tools, with practice in simpler operations. Construction of school furniture. 7½

Joinery 3, 4 (f and w). Special instruction and practice in use of power tools, in making cost estimates, blue print reading, and in wood finishing. $7\frac{1}{2}$ hours.

Building Estimating 5 (f or w). Includes study of estimating material cost and labor costs and requirements. Organized if sufficient demand. 5 hours.

3. MACHINE SHOP

Machine Shop 1 (f). Lathe instruction, including the use of measuring lathe, use of bench tools. $7\frac{1}{2}$ hours.

Machine Shop 2 (w). Milling machine, specialized instruction in slab milling gear cutting, jigs and fixtures construction, and use of the dividing head. $7\frac{1}{2}$ hours.

Machine Shop 3 (f). Shaper and drill press instruction. Instruction will be given on the Universal tool grinders. $7\frac{1}{2}$ hours.

Machine Shop 4 (w). Grinding instruction including internal, external, surface centerless grinding. $7\frac{1}{2}$ hours.

Machine Shop 5 (f or w). Special machines which include turret lathe operation, gear hopper, and gear shaper, with some attention toward tool making. $7\frac{1}{2}$ hours.

4. SHEET METAL

Sheet Metal 1 (f). Instruction in the care and use of tools in the simplest operations. $7\frac{1}{2}$ hours.

Sheet Metal 2 (w). Practice on a variety of small projects leading toward specialization. $7\frac{1}{2}$ hours.

Sheet Metal 3 and 4 (f and w). Specialization in general jobbing, general sheet metal, and heating and ventilation. 7½ hours.

5. WELDING

Welding 1 (f). Acetylene welding. Instruction in the use and care of equipment on various metals and alloys. Special attention is given to planning and layout of welding jobs. $7\frac{1}{2}$ hours.

Welding 2 (w). Electric welding. Instruction in the use and care of equipment and welding on various types of metals and alloys. Special attention is given to planning and layout of welding jobs. $7\frac{1}{2}$ hours.

6. GENERAL METALS

General Metals 1 and 2 (f and w). Designed for students desiring an overall experience in Machine Shop, Sheet Metal, and Welding, a proportion of time being spent in each shop. Organized if sufficient demand. 7½ hours.

